United States Patent [19]

Mori et al.

[11] **Patent Number: 4,558,757**

[45] **Date of Patent: Dec. 17, 1985**

[54] **POSITION COORDINATE INPUT DEVICE**

[75] Inventors: **Yoshihiro Mori**, Kadoma; **Osamu Yamamoto**, Hirakata; **Kazumasa Yamamoto**, Kawanishi, all of Japan

[73] Assignee: **Matsushita Electric Industrial Co., Ltd.**, Kadoma, Japan

[21] Appl. No.: **615,534**

[22] Filed: **May 31, 1984**

[30] **Foreign Application Priority Data**

Jun. 6, 1983 [JP] Japan 58-101122

[51] **Int. Cl.**[4] **G08C 21/00**

[52] **U.S. Cl.** **178/18;** 177/211

[58] **Field of Search** 178/18, 19, 20; 364/557, 556, 508, 571; 73/862.63, 862.65, 862.67; 177/211, 226; 338/3

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,657,475	4/1972	Peronneau et al.	178/18
3,727,002	4/1973	Pear, Jr.	178/18
4,121,049	10/1978	Roeber	178/18
4,389,711	6/1983	Hotta et al.	364/558
4,453,609	6/1984	Griffen et al.	73/862.65

FOREIGN PATENT DOCUMENTS

100136	of 1980	Japan .
10131	of 1983	Japan .
108545	of 1983	Japan .

Primary Examiner—Stafford D. Schreyer

Attorney, Agent, or Firm—Wenderoth, Lind & Ponack

[57] **ABSTRACT**

A position coordinate input device including an input plate subjected, at a point, to an external force with a finger, etc. so as to input data of coordinates of the point into a computer and the like. The device further includes four elastic support members for supporting the input plate, a pair of two first detectors yielding outputs of temperature characteristics of a first sign and a pair of two second detectors yielding outputs of temperature characteristics of a second sign opposite to the first sign so as to enable accurate detection of the coordinates of the point of application of the external force in a simplified construction.

12 Claims, 5 Drawing Figures